

# PUBLIC WORKS 2013 ANNUAL REPORT

"To create community through responsive leadership and services for the citizens and visitors of the Apple Capital of the World."

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Public Works Team

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River of mud and debris at Fifth and Pershing on August 4, 2013

### PUBLIC WORKS—WHY ARE WE HERE?

As an age old question, "Why are we here?" is one of the most difficult ones to ponder. But as for why the Wenatchee Public Works Department is here, that one is easier to answer. The Wenatchee Public Works Department is tasked with planning for, constructing, operating and maintaining the public infrastructure for the citizens of and visitors to the Apple Capital of the World. Easy task, right? Well, to the 64 employees of the Public Works Department that is an overly simplified version of what we do.

The term "planning for" includes comprehensive plans for water, wastewater, stormwater, regional water supply, a six-year transportation plan, a 25-year equipment rental and replacement plan, cemetery capital plan and involvement in the City's overall Capital Facilities Plan.

The "infrastructure" that is being operated and maintained includes hundreds of miles of water mains, thousands of valves and water meters, nearly 10,000 structures in and under the City streets, and speaking of streets, how about over 250 lane miles of streets. Let's not forget about the couple hundred miles of wastewater and stormwater mains, five lift stations and a wastewater treatment plant capable of collecting, treating and discharging up to 5.5 million gallons of wastewater every day. The water supply system that the City operates delivered 3.19 billion gallons of water in 2013 and the fleet that is maintained includes 198 vehicles and pieces of equipment ranging from snow blowers to fire engines and dump trucks.

With all that said, why the Public Works Department is so valuable to the City of Wenatchee was best demonstrated by the response to two major flooding events on August 4th and September 5th of 2013. When thunderstorms in the hills above the City caused silt and debris laden floodwaters to rush down through Wenatchee neighborhoods all those available answered the call. During the storms and resultant floods, it was amazing to witness the efforts of the department in action. Public Works crews worked through the night and the next day following each event to clear mud and debris. After the September storm, I took a quick inventory to see who had been involved with the damage control and cleanup efforts and every division of the Public Works had contributed in some way to the effort. During times of crisis the true nature of individuals shines through, and it was evident that the true nature of the department was shining when those in need were able to rely on the Wenatchee Public Works Department to help mitigate the effects of the flooding and begin the process of digging out from the mud and debris that came with it.

In light of all of the day-to-day work that the department does for its citizens, work that we should all be proud of, it is during these major events that the talent, ability and dedication of the Public Works Team is most evident. I consider myself privileged to be working with such a hardworking and dedicated group of Public Works professionals. So take a look at many of the other accomplishments of this team over the past year as we present to you the **2013 Public Works Annual Report.** 

~Daniel Frazier, Public Works Director

## PUBLIC WORKS ...



Public Works staff working on cleaning up the roads and stormwater system after the flooding in September.

### EMPLOYEE MESSAGE ...

The majority of our daily work is routine maintenance and behind the scenes activities. If you have clean water to make your morning coffee and the traffic is flowing smoothly on your way to work you probably will not even think about what all went into making that possible. Our job is to build and maintain all of the infrastructure that goes into making the City of Wenatchee a great place to live.





After the water department tapped the water main for a new fire line for a downtown business, they worked with the street department to replace the sidewalk and road.



Street Division building a new storage area for Class A Biosolids at the drying beds.



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## ENGINEERING ...

The Engineering Division designs and inspects the structural integrity and safety of municipal infrastructure such as streets, sidewalks, water supply networks, sewers, street lighting, public parks, bicycle and walking paths.

#### Accomplishments for 2013:

- Completed construction of Pine Street Improvements
- Completed construction of South Wenatchee Avenue Improvements
- Completed construction of the Orondo and Worthen Street Improvements
- Coordinated with WSDOT during construction of the George Sellar Bridge West Improvements
- Designed and constructed the Parkside Sidewalk Improvements
- Designed and constructed the Miller Street Chip Seal project
- Completed design for the North Wenatchee Avenue Preservation project
- Striping modifications for truck accommodation on SR285
- Secured funding to upgrade all school beacon controllers to wireless capable.
- GIS database improvements including the addition of LIDAR data, a street sign inventory, utility inspection tool
- · Updated traffic counts
- Implemented new process for reviewing utility services.
- Completed the installation of the stormwater collection system on Marr and Cashmere



Before

After

Pine Street Improvements

#### Looking Forward to 2014:

- Complete the North Wenatchee Avenue street preservation project from 5th to Miller Street with modifications of the stormwater system and replacement of portions of the water supply system.
- Completion of permanent plastic pavement markings on Miller Street
- Improvements to signal at 9th and Miller Street
- School Zone Traffic Safety Improvements
- Right-of-way acquisition on Okanogan, Western, and Miller/Chelan projects.
- Development of a pavement management program
- Development of signing retro-reflectivity program
- Development of sidewalk database for risk and ADA compliance
- Implement signal timing changes downtown and along Mission and Chelan to allow for improved access downtown and reduced delay along the couplet.
- Complete the construction of Booster Pump Station #1
- Construct the Wenatchee Valley Regional Decant Facility



South Wenatchee Avenue Improvements

#### In design:

- Downtown Revitalization
- Western Avenue Safety Improvements
- SR 285 Safety Improvements including pedestrian traffic signal, intersection bulb outs, and signing upgrades.
- Okanogan and Red Apple Road Sidewalk Improvements
- McKittrick and Wenatchee Avenue Signal
- Mission and Miller Street Intersection Improvements
- Chelan and Miller Street Intersection Improvements
- School Zone Traffic Safety Improvements
- Downtown and Couplet Traffic Analysis
- Wenatchee Valley Regional Decant Facility
- Regional Water Redundancy Study
- North Miller Street Stormwater System Restoration
- Millerdale Water Transmission
   Main Replacement



New stormwater pond being installed near the George Sellar Bridge

Approximately 400 tons of asphalt were placed in 2013



Crack sealing

#### **Looking Forward to 2014:**

- Continue pavement preservation program through crack sealing and skin patching
- Replace concrete roadway panels
- Replace defective alley approaches in various locations
- Install 350 new street name signs

#### STREETS...

The Street Maintenance Division has the responsibility of maintaining the City's streets, alleys and publically maintained sidewalks. This maintenance also includes snow removal and ice control on all City streets and along the sections of the state highways that run through the City.

#### 2013 Projects and Routine Maintenance:

- Swept over 250 miles of roads
- Painted 425,000 linear feet of pavement markings
- · Repaired hundreds of potholes
- · Graded many of the City's alleys
- Replaced numerous storm and sewer lids and rings
- Maintained the canyon drainages at road crossings
- Replaced dozens of sections of sidewalk around the City
- Crack sealed many City streets using 10,000 pounds of crack seal material
- Maintained stamped concrete crosswalks
- Maintained traffic signs, both regulatory and informational
- · Roadside maintenance including vegetation control
- Snow plowing and de-Icing all City streets
- Asphalted utility trenches for the Water Division
- Set up road closures for the Apple Blossom Festival and for other parades and public events, approximately 20 events yearly
- Pulled out sidewalks for property owners replacing hazardous walks
- Picked up leaves from various parts of the City



Approximately
2,000 cubic
yards of material
was screened to
be reused during
the 2014
construction
season

## SIGNALS AND LIGHTING ...

The City's lighting technicians maintain the City signals and street lights.

#### 2013 Projects and Routine Maintenance:

- Maintained 2,000 street lights, with nearly 600 lamps being replaced annually
- Maintained the 18 independent school zone warning systems
- Started school beacon project installed new wireless beacon control units for radio communication with school zones, 7 were completely rebuilt with new poles, bases and heads
- Maintained 50 signal systems, including yearly cabinet maintenance
- · Replaced damaged light poles
- · Repair defected lighting circuits
- · Replaced cabinet at First and Chelan
- Rewired fire signal on Maple
- Updated cameras
- Yearly malfunction monitor (MMU) testing

#### **Looking Forward to 2014:**

- Complete school beacon project
- Rewire and replace cabinet at 9th and Miller
- · Continue yearly maintenance and MMU testing
- Testing lighting and signal equipment for transient voltage
- Install pedestrian countdowns on Mission and Chelan

Left: New signal on Ferry Street

Right: New WBCU unit for school beacons



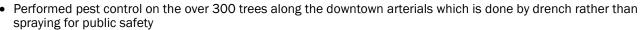
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## PARK MAINTENANCE & CEMETERY ...

The Park Maintenance Division has the responsibility for the daily operation and maintenance of the City's park system.

#### 2013 Projects:

- Maintained the landscaping at 13 parks, 7 City facilities and at the City's water reservoirs and pump stations. This includes mowing, weeding, pruning and maintaining the irrigation systems. Operation of the parks also includes daily garbage removal, opening and cleaning the public restrooms
- Sprayed broadleaf herbicide on all city parks
- Planted and maintained over 100 floral baskets for the downtown area
- Added ground covering to the play equipment to ensure safety standards were met
- Assisted cemetery staff with the maintenance and care of the cemetery, including the trimming of over 18,500 memorial markers twice a year
- Maintained the streetscape along Columbia Street, Walla Walla Avenue, Riverside Drive, Walnut Street and Wenatchee Avenue





Fixed the irrigation system and planted new sod at Methow Park for a soccer field

#### **Looking Forward to 2014:**

- Update landscaping at entrance to Lincoln Park
- Work with WSDOT Contractor on changes to Locomotive Park landscaping and irrigation associated with the George Seller West Interchange Project
- · Finish landscaping at Washington Park
- Work with the contractor on new irrigation system for the Downtown section of Wenatchee Avenue



Park vegetation management

Trimming around memorial markers

#### The Cemetery:

The cemetery staff is responsible for the sales of burial plots and cremation niches, sales of burial containers and memorial markers, coordination of burial arrangements with local funeral directors and grave site opening and closing services. The facility has been averaging nearly 200 services per year. The cemetery staff is also responsible for the grounds maintenance of the entire 34 acre site, as well as the Home of Peace mausoleum on Miller Street.

## FLEET & FACILITIES...

The Fleet and Facilities Division is the internal support for the City. This division is crucial as it keeps the buildings and equipment operating smoothly, allowing all the employees to do their jobs.

#### 2013 Projects and Routine Maintenance:

- Facilitated the procurement and prepared for service the following vehicles: 4 new police vehicles, a van for the IS department, 2 dump trucks, a fire/rescue truck, a water crew service truck and a truck for meter reading
- Provided service and routine maintenance on nearly 200 pieces of equipment
- Participated for the 5th year in the Wenatchee Valley College internship program. This year we have 2 interns who have been a great help to the fleet department.
- Completed roof repair projects
- Assisted the Performing Arts Center with their heating system
- Maintained 284,792 square feet of buildings city-wide by providing HVAC work, plumbing, lighting, carpentry and general facility repairs

#### Looking Forward to 2014:

- Finish setting up equipment purchased in 2013
- Purchase and set-up: new police vehicles, a new fire truck, a water/de-ice truck, and a snow plow
- · Auction declared equipment
- HVAC upgrades to the Convention Center
- Roof maintenance for all city buildings
- HVAC training
- Lighting at the Convention Center
- Inventory at the Convention Center



Mechanic working on a city service truck.

### WASTEWATER ...



The main entrance to the WWTP—
The entrance was regraded and paved,
and then finished with new fencing, landscaping and
a new sign



Left: Looking through one of the viewing windows at the artistic portion of biofilter

The wastewater treatment plant operates 24 hours a day, seven days a week to treat the approximately 3 million gallons of wastewater a day. Pollutants are removed through mechanical and biological processes that are managed by certified wastewater operators under a permit issued by the Washington State Department of Ecology. The Wastewater Division staff also manage the City's biosolids program and maintenance of the sewer collection system which consists of 5 lift stations and over 140 miles of sewer mains.

#### 2013 Projects and Routine Maintenance:

- Received an award from Ecology for permit compliance
- Relocated the Squilchuck Lift Station
- Finished the visual improvement portion of the Wastewater Treatment Plant Odor Control, Visual Mitigation and Headworks Screening Project
- Replaced process control valve motors in the secondary system
- Assisted the stormwater utility with stormwater collection system maintenance
- Completed first round of priority pollutant testing for Ecology (Two per permit cycle)



The newly relocated Squilchuck Lift Station

#### **Looking Forward to 2014:**

- Clean and inspect 33% of the sewer collection system
- Complete the odor improvements to the plant
- Complete second round of priority pollutant testing

## STORMWATER ...

The stormwater utility is operated and maintained by staff from multiple divisions within public works including Environmental, Engineering, Streets, Parks, Water and Wastewater.

#### 2013 Accomplishments:

- 891 inspections of stormwater structures and water quality facilities completed using GIS (Environmental)
- 6 water quality facilities maintained (Parks)
- 26 new water quality facilities added (Engineering)

#### **Looking Forward to 2014:**

- Field assess two high priority stormwater basins
- Clean catch basins identified as needing maintenance
- Update GIS database with outfalls and water quality facilities



Tree boxes and impervious pavement on Riverside Drive are designed to remove pollutants from stormwater

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Installing a new water service

## WATER UTILITY ...

The primary job of the water crew is to provide clean drinking water to our residents 24 hours a day 7 days a week by keeping the City of Wenatchee's water utility operating smoothly. In addition to our utility, the City of Wenatchee performs the daily operation and maintenance of the Regional Water System, which provides drinking water to all residents in the Wenatchee Valley.

#### 2013 Projects and Routine Maintenance:

- Booster Pump Station #1 renovation
- Inspected all 7,550 water meter chambers
- Inspected and serviced fire hydrants
- Maintained main-line valves
- Replaced the 6" steel water line on the 1100 block of First Street
- Finished moving utilities for the George Sellar Bridge project
- Checked pressure reducing valves (PRVs) for leaks and pressure levels every week
- Visually checked the 4 main pumping wells, the 2 pump stations, the 4 reservoirs and the chlorination system daily
- Inspected the backup wells weekly and flushed them monthly
- Performed the annual visual inspection of the pipeline in the Odabashian bridge crossing

The Regional Water System pumped

3,185,450,000 gallons of water in 2013.



New booster pumps installed as part of the renovation of BPS #1

#### **Looking Forward to 2014:**

Uncovering and repairing a leaking water main line

- Continue implementation of valve maintenance program
- Repair and replace fire hydrants
- Focus on maintenance and repair of existing infrastructure



Installing a hydrant at Chelan and Ferry

#### In 2013 the water crew had:

- Over 300 requests for locates
- Changed out over 100 meters
- Replaced or reprogrammed over 400 of the MXU radios which provide meter readings
- Over 1,200 times of turning the water off or on for water customers - for account closures, non-payment and customer repairs

## ENVIRONMENTAL ...

The Environmental Division is responsible for implementing utility programs and helping to insure that the City's water, wastewater and stormwater utilities stay in compliance with federal and state regulations. The Environmental Division oversees the following utility programs: cross connection control, wellhead protection, water use efficiency, water quality monitoring, stormwater pollution prevention, and pretreatment.

#### 2013 Accomplishments:

- Prepared 5 reports for state agencies
- Illicit Discharge campaign for pool discharges
- Over 200 Pretreatment Inspections
- 18 Water Quality Concerns
- 5 Public Education and Outreach Events

#### **Looking forward to 2014:**

- Wellhead Protection Education & Outreach
- Update Cross Connection Control Outreach & Education
- Unregulated Contaminant Monitoring Phase 3
- Update industrial user database & conduct pretreatment surveys
- Provide dual language stormwater & water education and outreach materials



Stormwater Information Booth at Alcoa's Green Fair

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# PUBLIC WORKS TEAM

#### Water Utility and Regional Water Crew



L to R: Arthur Martinez, Mike Cockrum, Dennis Smith, Terry O'Keefe, Tony Scherting, Kevin Sandland, Bud Reister, Dean Fleming

#### Fleet and Facilities Crew



L to R: Ramiro Lopez, Jason Munson, Mike Merz, Don Bitterman, Lynn Kirk, Kevin Patrick, Alisa Clardy, Jeff Walsh

#### **WWTP Crew**



L to R: Josh Rader, Chad Noah, Kevin Randich, Katy Landers, Adam Reichert, Pete Moser, Bob Calhoun, Devlin Walt -not pictured Jim Brumbeck

#### Administration, Environmental and Engineering



L to R: Bob Ritter, Gary Owen, Ron Hall, Ruta Jones, Dan Frazier, Donald Nelson, Chuck Mayhew, Jennifer Saugen, Gary Faulkner, Julie McWiggins, Paula Salter, Margie Wilson, Brenda Guske, Jessica Shaw—not pictured Matt Leonard

#### Park Maintenance and Cemetery Crew



L to R: Dave Hendrickson, Lorinda Davis, Scott Wilkerson, Rob Richards, Ron Marks, Tom Lewis, Jeff Pulver, Axel Garcia, Dan Patrick

#### Street and Lighting Crew



Back Row L to R: James Frost, Charlie Pearsall, Josh Winn, Will Weems, Andy Greer, Andy Greene, Todd Davis, Terry Mitchell, Tim Herdt Front Row: Bill Schneider

#### Public Services Center

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